Instruments for Dairy & Pharma Process Machineries





RTD Probe with Temperature Transmitter

Model: RTD Probe Specification:

RTD Probe

- PT100 (3 Wire simplex)
- Process Connection: 1.5" TC (50.5 mm)
- Dia: 6 mm
- Length: up to 100 mm. (Other on Request)
- Weather proof Aluminium Dia. Head IP 65

Temperature Transmitter (Make: Pixsys)

- Programming: Wireless with Mobile Application (No wiring required)
- ❖ Input : RTD (PT100/NI100/PT1000)
- Output: 4...20mA Loop Powered
- Power supply : operating range 6-32 Vdc
- Connection : Screw pins
- Fixing : On DIN/B head
- Operating conditions: Temperature -40+85 °C, humidity 30..90 uR% (non condensing)
- According to : CE, EN 61000-6-4, EN 61000-6-2, UL 61010-1
- ❖ 3600 Point Data Logging

Application: Hygienic Process In Pharmaceutical And Dairy industries

Hygienic Pressure Transmitter

Model: TFP310 (Make: Trumen)

Specification:

- Piezoresistive pressure sensor design
- Measuring ranges: -1 bar to 40 bar
- Output: 4...20mA, 0...10V, 0...5V and others
- Accuracy: ±0.25%FSO or ± 0.5%FSO
- Calibrated and temperature compensated
- Flush diaphragm construction
- Variety of pressure & electrical connections
- Operating Temperature Range: -20 to 200 °C

Application : Hygienic Process In Pharmaceutical & Dairy Industries

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Pressure Transmitter with Thread Connection

Model: TFP40 (Make: Trumen)

Specification:

- Measuring ranges from 100mbar to 600bar
- Absolute, gauge and sealed gauge
- ❖ Accuracy: ±0.25%FSO or ± 0.5%FSO
- Calibrated and temperature compensated
- Stainless steel construction
- Piezoresistive pressure sensor design
- Variety of pressure & electrical connections
- Output 4...20mA, 0...10V, 0...5V and others

Application:

- Process control systems/ utility
- * Refrigeration and HVAC controls
- Pumps and compressors

Compact Liquid Vibrating Fork Level Switch

Model: LFV 12 (Make: Trumen)

Specification:

- ❖ Industrial power supply (15 to 80 VDC or 15 to 260 VAC)
- Low power consumption.
- No calibration required.
- Threaded & Hygienic process connection.
- Suitable for side as well as top mounting.
- Minimum 1/2" process connections
- High pressure up-to 15 bar
- High Temperature upto 150 °C available

Applications :

- Flow/No-Flow detection in pipe-lines.
- Used as a full, empty and demand alarm in fluid containers, tanks containing liquids of various types, including milk & milk products, edible oil, fuel oil, lube oil, brewery, pharmaceutical fluids etc.



Model: 901.6x (Make: Beck GmbH)

Specification:

Positive pressure range: -700 mbar to 12 bar

Max. operating pressure: 25 bar

Switch type: 1 - SPDTProtection class: IP65

Process connection : Triclamp



Air Differential Pressure Switch

Model: 930.85B (Make: Beck GmbH)

Specification:

- ❖ Pressure range : 100 1000 PA
- Switch type : SPDT (1 NO + 1 NC)
- Protection standard : IP54
- * Temperature range: -20°C to +85°C
- Hose connection with 6 mm (OD)

Application:

HEPA Filter



Digital Differential Pressure Transmitter

Model: 990 (Make: Beck GmbH)

Specification:

- Range: 0 to 100 mmWC (Other on Request)
- Pressure unit : mmWC, Pa, mbar,
- Power Supply: screw terminals 24 VAC/VDC
- ❖ Output : 4 ... 20 mA or 0 ... 10 V, 3-wire
- Switching output: 2 relays with 50VAC/5A (S1) and
- 250VAC/5A (S2) switching capability
- Display : Red 7-segment LED display, 4-figure
- Accuracy : ≤ ± 1% of FS
- IP65 SS/ MS enclosure with process connection: 2 - Hose
- Connection with 4 mm OD

Application :

HEPA Filter



Liquid Vibrating Fork Level Switch

Model: LFV (Make: Trumen)

Specification:

- Compact size.
- Universal industrial power supply (15 to 80 VDC & 15 to 260 VAC).
- Low power consumption.
- No calibration required.
- Threaded & Hygienic process connection.
- All liquids from free-flowing to viscosity up-to 10,000cP.
- Process pressure max. 15 bar.
- ❖ Process temperature max 200 °C.
- Suitable for side as well as top mounting.
 Minimum and maximum fail safe field selectable.

Application

- High low detection in Silo/ Vessel
- Flow/ no-flow detection in pipe-lines



Capacitance Level Transmitter

Model: TLC (Make: Trumen)

Specification:

- Compact size.
- * Rigid rod/flexible rope versions.
- Wide range industrial dc power supply (15 to 60 VDC).
- Loop powered device (two wire).
- No potentiometers hassle free calibratiowo wirn.
- Various customized process connections like Threaded/Flanged/Hygienic etc.
- * Remote electronics version available on request.
- Process temperature max. 200 °C.
- Process pressure max. 20 bar.
- Suitable for corrosive liquids.
- Suitable for top mounting.

Application:

* Free flowing homogeneous liquids like oil, raw water, WFI, DM/DI water etc.



Compact Turbidity Sensors

Model: EXspect & Explore (Make: Exner)

Specification:

- Compact design with integrated amplifier and touch display
- * %-turbidity or custom defined unit
- Durable sapphire lens
- Hygienic Design, CIP/SIP-capable
- LED light source guarantees a durable and stable signal
- * Easy parameterization via display or software EXpert

Application:

- Precise phase separation
- Control of separators
- Filter monitoring
- Colour-independent concentration measurement
- CIP return line
- Product/Water Push to save water and milk
- Monitoring of product changes
- Yeast management

Inline Optical Brix Monitor

Model: DCM-20 (Make: KxS Technologies)

Specification:

- Refractive Index range: Full range, nD=1.3200...1.5300 (= definition to 0...100%wt)
- Output units: Brix/ Conc% / g/cm3 / refractive index unit RIU
- Measurement precision: ±0.025 Brix/%wt
- Measurement accuracy: ±0.0002 refractive index unit RIU
- Speed of response:1 sec. undamped
- * Temperature compensation: Automatic, individual zero point calibration
- Hygienic design:3-A Sanitary Standard 46-04 and EHEDG Type EL Class I certified.
- ❖ Process connection: 1.5" and 2.5" sanitary connection, Varinline® and APV tank bottom flange Optional flow cell housing connections with sanitary or DIN/ANSI flanges
- Process pressure:9-55 bar, 130-800 psi (depending on process connection)
- Process temperature:-40°C ...100°C continuous process temperature Withstands 130 °C CIP and SIP sequences
- Sensor protection class:IP67, Nema 4X
- Power Supply: 24 VDC
- Output: 2 pcs independent 4-20 mA user configurable outputs

Application:

- ❖ Inline Brix monitors drive Dairy evaporators and Spray dryers
- Inline Brix monitors drive whey protein concentrate membrane filtration systems



Flush Diaphragm Type Level Transmitter with Indicator

Model: TFP310+ STR551 (Make: Trumen) Specification:

- Piezoresistive pressure sensor design
- Measuring ranges: -1 bar to 10 bar
- Output: 4...20mA, 0...10V, 0...5V and others
- Accuracy: ±0.25%FSO or ± 0.5%FSO
- Calibrated and temperature compensated
- Operating Temperature Range:-20 to +150oC
- Variety of pressure & electrical connections

Indicator_STR551

- ❖ Size: 96x48
- Customizable linear input (max 16 steps)
- Universal Power supply
- Inbuilt TPS
- OLED Sharp Display
- * Retransmission Output to connect with PLC
- 2 High and low Level Switch for Safety
- Modbus communication
- 3600 points data logger
- Configuration very easy and it can done through mobile

Application: Level Measurement at silo/ Vessel in Pharma/ Dairy Industry

Milk Silo Level Transmitter

Model: PiezoSwitch PS (Make: Hengesbach)

Specification:

- ❖ Output signal 4...20mA, 2 wire
- * Max. 2 PNP-switching outputs, 24V DC, max. 50mA,
- With indicator for switching status
- LED-display for measurement reading
- easy configuration and operating modus with 3 buttons
- Menu-driven configuration on site
- ❖ Free programmable measuring Ranges from -1/0 up to 30bar, TurnDown 4
- ❖ Process connections G1" elastomer-free sealing cone, turnable or EHEDG
- EL-ASEPTIC certified modular system PZM, with more than 20 different process connection adapters and weld-in sockets
- ❖ Process Temperature -40°C up to 125°C/ 140°C 1h during CIP & SIP-processes
- * Reliable switching functionality

Application:

- Level measurements in tanks with high pressure or vacuum load and low filling height
- Highly precise measurement of content Pressurized Tanks / Vacuum Measurements with high temperature



Load Cell/Strain-Gauge Indicator

Model: STR 561 (Make: Pixsys)

Specification:

- Multilingual interface with full-text menus for intuitive and fast programming
- Visualization of process trend or Bar graph
- Alarm thresholds and process analogue retransmission
- ❖ Size:96x48
- Universal Power Supply
- OLED Sharp Display
- * Retransmission Output to connect with PLC
- 2 High and low Level Switch for Safety
- Modbus Communication
- 3600 points data logger
- Configuration very easy and can done through mobile

Application:

Connected To Any make of Load Cell



Air Flow & Velocity Transmitter

Model: DPT Flow+ FloXact Series (Make: HK Instruments Oy)

Specification:

- * Range : 0 ... 1000 Pa
- Multiple field selectable measurement
- * Measuring Units:
 - Volume flow: m3/s, m3/h, cfm, l/s
 - Velocity: m/s, ft./min
 - Pressure : Pa, inWC, mmWC, kPa, mbar, psi
- With Autozero function
- Supply Voltage: 24 VAC or VDC, ±10 %
- Output: 4 ... 20 mA or 0 ... 10 V. 3-wire
- * Accuracy (from applied pressure): 1%
- Protection standard: IP54
- Display : 2-line LCD display
- Line 1 : Volume or velocity measurement
- Line 2 : Pressure measurement
- ❖ Length : 100 mm to 450 mm



Air Flow Measurement in DHS



FloXact-R160

Digital Process Indicator

Model: JIR (Make: Shinko)

Specification:

- 3 Points Alarm output
- Compact Design
- Galvanic Isolation 1.5 kV (Input, Output and Power Supply)
- Sampling Time 125 ms
- 18 type Input signal Selection
- User-Friendly Operation and Configuration
- Password Protection for Configuration
- IP66 Protection Class for Front Flush
- Standard Retransmission Output (4-20 mA, 12000-bit Resolution)
- CE and UL approved
- * Lower Power Consumption (8VA), Longer Life of Electronics Modules
- Loop Break & Sensor Burnout Alarm
- Multi-input:total 18 types of input



Exner Retractable Fittings

Model: EXstatic 310, EXstatic 311 (Make: Exner)

Specification:

- Designed according to hygienic criteria
- Stainless steel AISI 316L / 1.4404
- * EPDM sealings with FDA and USP VI approval
- Up to 10 bar and 140 °C
- Protection cap for cable connection
- Process connections for hygiene applications
- Static probe housing with Ingold connection (DN25)
- Static probe housing with clamp connection
- Excellent stainless steel surface qualities (up to Ra $< 0.37 \mu m$)
- * Available with or without protection cage
- Suitable for sensors with 120 mm length and PG13.5 connection

Application:

- Food
- Pharmaceutical
- ❖ For all kind of Ø12/120mm sensors with thread PG13.5 (pH-glass- and ISFET sensors, conductivity- or temperature sensors, turbidity and other optical sensors)

PID Controller

Model: BCS Series (Make: Shinko)

Specification:

- Convenient Initial setting mode!
- * AT on startup function!
- Simplified program control!
- Simplified converter function! * A variety of event input/ output functions!
- Large, Easy-to-view, 5-digit PV, SV displays!
- Compact, 60 mm-deep control panel interior!
- Simple settings from a PC
- Drip-proof/Dust-proof IP 66
- Control O/P: Relay contact 1a, Non-contact voltage(for SSR drive), Direct current (as per ordering)
- Multi-input: Total 18 types of input
- Sampling time 125 ms
- Password protection for configuration



DIN Rail Temperature Transmitter Signal Isolator

Model: DCL 33 (Make: Shinko)

Specification:

- Multi-input:total 18 types of input
- Loop Break Alarm output
- Compact Design
- Galvanic Isolation 1.5 kV
- Sampling Time 125 ms
- User-Friendly Operation & Configuration
- Password Protection for Configuration
- Calibration of Transmitter by Key Pad



Application:

- Universal Isolated Digital Temperature Transmitter
- Digital Temperature Switch
- Universal Signal Isolator

Special Drive for Gate Opening and Closing of DHS

Model: PSE200 (Make: Halstrup Walcher)

Specification:

- Release-input (optional) and position report ensure high level of functional security
- Variable positioning range up to 50 rotations
- Position: Horizontal construction
- Protection class: IP 55
- Position feedback: 0 .. 10 V (floating contact "position reached")
- Output shaft:12 mm solid shaft with flattening
- Positioning accuracy: 2 % of positioning range
- Power supply:24 VDC

